CLAIMS

What is claimed is:

1. A method of generating a decentralized model on a computer network, comprising the steps of:

generating data objects and/or function objects;

publishing references to the data objects and/or the function objects;

subscribing to the data objects and/or the functions by creating relationships between the data objects and/or the function objects through referencing the data objects and/or the function objects within the function objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge;

sending messages to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

solving the functions when the messages are received;

storing the data objects and/or the function objects in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.

2. The method of Claim 1 wherein at least a part of the configuration of the networks of linked data objects and/or function objects is predefined and used to determine which data objects and/or function objects are generated on which of the computing devices in the computer network.

3. The method of Claim 1 wherein a user interface is defined that displays the data objects and/or function objects on a computing device on the computer network using a client process that communicates with a server process wherein the data objects and/or function objects can be viewed on any computing device connected to the computer network.

4. The method of Claim 1 wherein the data objects and/or function objects are stored in logical groups.

5. The method of Claim 4 wherein the logical groups are defined by geography, business organization or site.

6. The method of Claim 1 wherein the references to the data objects and/or function objects are published using electronic media, print media or human conversation.

7. The method of Claim 6 wherein the electronic media is indexed and searchable.

8. The method of Claim 1 wherein the step of generating the data objects and/or function objects provides an interface mapping for data objects and/or function objects stored in application programs, databases or computer code libraries.

9. The method of Claim 1 wherein the function objects are implemented by computer code that is complied, dynamically linked and evaluated at runtime.

10. The method of Claim 1 wherein the function objects are implemented by computer code that is interpreted and evaluated at runtime.

11. The method of Claim 1 wherein the sending or receiving of messages can be enabled or disabled based on predefined criteria.

12. The method of Claim 11 wherein the criteria is based upon message source, message destination or message contents.

13. The method of Claim 1 wherein the networks of linked data objects and/or function objects are independently published to, and subscribed to, in a manner free of a globally predefined network of data objects and/or function objects.

14. An apparatus for generating a decentralized model on a computer network, comprising:

data objects and/or function objects;

references to the data objects and/or the function objects, the references being published;

subscriptions to the data objects and/or the functions generated by creating relationships between the data objects and/or the function objects through referencing the data objects and/or the function objects within the function objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge;

messages sent to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

a solver unit solving the functions when the messages are received;

a storage unit storing the data objects and/or the function objects in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are

created using multiple coordinating computing devices on the computer network.

15. An apparatus for generating a decentralized model on a computer network, comprising:

a means for generating data objects and/or function objects;

a means for publishing references to the data objects and/or the function objects;

a means for subscribing to the data objects and/or the functions by creating relationships between the data objects and/or the function objects through referencing the data objects and/or the function objects within the function objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge;

a means for sending messages to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

a means for solving the functions when the messages are received;

a means for storing the data objects and/or the function objects in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.

16. A computer program product comprising:

a computer usable medium for generating a decentralized model on a computer network;

a set of computer program instructions embodied on the computer usable medium, including instructions to:

generate data objects and/or function objects;

publish references to the data objects and/or the function objects;

subscribe to the data objects and/or the functions by creating relationships between the data objects and/or the function objects through referencing the data objects and/or the function objects within the function objects, thereby linking the data objects and/or the function objects, wherein networks of linked data objects and/or function objects emerge;

send messages to referencing data objects and/or function objects when referenced data objects and/or referenced function objects change;

solve the functions when the messages are received;

store the data objects and/or the function objects in a distributed manner across multiple computing devices on a computer network; and

wherein the relationships between the data objects and/or function objects are created without using a single coordinating computing device, or are created using multiple coordinating computing devices on the computer network.